

October 3, 2018

Mr. Bruce Morrison Project Manager U.S. Environmental Protection Agency, Region 7 ART Division / RCRA Corrective Action 11201 Renner Boulevard Lenexa, Kansas 66219

RE: Revised Corrective Measures Implementation Work Plan

Former Solutia – John F. Queeny Plant

St. Louis, Missouri

EPA ID No. MOD 004 954 111

Dear Mr. Morrison:

This letter accompanies the delivery of the Revised Corrective Measures Implementation Work Plan for the Former Solutia John F. Queeny Plant to U.S Environmental Protection Agency (EPA). The revisions were made in accordance with your letter dated September 18, 2018. An electronic version is also provided.

Please let me know if you would like additional copies. I can be reached by phone at 314-480-4694, or via email at <a href="mailto:larryr@environmentalops.com">larryr@environmentalops.com</a>.

Respectfully submitted,

Lawrence C. Rosen, R.G. / Project Manager

Environmental Operations, Inc.

Attachment: Corrective Measures Implementation Work Plan (Hard Copy and CD)

Copies: Mr. Michael House/Solutia

Mr. Rich Nussbaum/MDNR

Ms. Christine Kump-Mitchell/MDNR



## CORRECTIVE MEASURES IMPLEMENTATION MONITORED NATURAL ATTENTUATION MONITORING AND VAPOR INTRUSION WORK PLAN

Former Solutia Queeny Plant St. Louis, Missouri

**October 3, 2018** 

Prepared for:

**SWH Investments II** 

*Prepared by:* 

Environmental Operations, Inc.

1530 South 2<sup>nd</sup> Street

St. Louis, Missouri 63104

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#### **List of Acronyms and Abbreviations**

Acronym/Abbreviation Definition

APA Former Acetanilides Production Area

BGMP Baseline Groundwater Monitoring Plan

CMIWP Corrective Measures Implementation Work Plan

CMS Corrective Measure Study

EOI Environmental Operations, Inc.

EPA U.S. Environmental Protection Agency

FBCSA Former Bulk Chemical Storage Area

HASP Health and Safety Plan

HHRA Human Health Risk Assessment

HSA Hollow Stem Auger

IMWP Interim Measures Work Plan

MNA Monitored Natural Attenuation

MSD Metropolitan Sewer District

PVC Polyvinyl chloride

QAPP Quality Assurance Project Plan

RCRA Resource Conservation and Recovery Act

Site Former Solutia Queeny Plant

SOP Standard Operating Procedures

USGS U.S. Geological Survey

VI Vapor Intrusion



#### **EXECUTIVE SUMMARY**

This Corrective Measures Implementation Work Plan (CMIWP) has as its principal components a groundwater monitoring plan and an approach for vapor intrusion evaluation. This work plan has been developed pursuant to the United States Environmental Protection Agency's (EPA) approval of the Corrective Measures Study (September 2017) and its recommended remedy. The EPA issued its Final Decision, dated April 30, 2018. The Site remedy is monitored natural attenuation (MNA) and implementation of land use restrictions that requires measures to address potential vapor intrusion for future construction. It prohibits residential development and potable use of groundwater. A Restrictive Covenant was filed with the City of St. Louis, a copy provided to EPA, and included here in Appendix A.

Environmental Operations, Inc. (EOI) is providing consulting engineering services to SWH Investments II to address obligations under an Administrative Order on Consent (EPA Docket No: RCRA-07-2009-0015), to close the facility, and to prepare the property for redevelopment for industrial/commercial use. This work plan addresses implementation of the approved remedy.

This work plan was developed with the following understanding of prior use, future use, and data generated from prior groundwater sampling events as rationale for proposed sampling and analyses described herein.

- The Site is and has been industrial, and repurposing plans envision light industrial/commercial usage.
- The redevelopment effort, conceptually named Soulard Business Park, has been initiated. As communicated to EPA, the first phase of redevelopment presently includes construction and improvements to the area east of the former FF Building area and north of the former Acetanilides Production Area, referred to as the Faultless Linen parcel. Subsequent phases would follow on other portions of the Site.
- Groundwater sampling and analyses, limited to the upper aquifer (Fill/Silty Clay unit), will generate data to support the MNA portion of the remedy.
- Vapor intrusion evaluation for new construction onsite and at downgradient locations to the north of the site.

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#### 1 INTRODUCTION

The EPA-approved Interim Measures Work Plan (IMWP) Completion Report detailed the activities conducted at the former Solutia Queeny Plant following the approved IWMP and the Baseline Groundwater Monitor Plan (BGMP). These plans were approved by the United States Environmental Protection Agency – Region VII (EPA), for the purpose of implementing an interim remedial response and to evaluate site-wide groundwater for the former FF Building Area, the former acetanilides production area (APA), and monitor groundwater discharging to the Mississippi River from the former bulk chemical storage area (FBCSA).

The EPA-approved Corrective Measures Study (CMS) report considered prior use, future use, and data generated from prior groundwater sampling events as rationale for conducting an updated, focused Human Health Risk Assessment (HHRA), development of remedial goals, and evaluation of remedial technologies. These remedial technologies were then qualitatively evaluated against the four primary evaluation criteria (e.g., protection of human health and the environment, etc.). The alternatives were then quantitatively screened against the four balancing criteria (implementability, etc.). The alternatives were force-ranked against each other for each balancing criterion such that a numerical ranking was developed.

For the former FF building area, former APA, and the FBCSA, the evaluation process identified institutional controls with monitored natural attenuation as the most favorable remedy. The former VV Building Area remedy, which included a cap along with institutional controls, was previously identified in the IMWP.

For the groundwater monitoring portion of the work plan, the sand and bedrock aquifers are no longer integral to assessing impacts at the site, and the focus going forward is on the shallow aquifer, designated as the Fill/Silty Clay unit. This plan describes the approach for evaluating vapor intrusion and revises the groundwater monitoring network and frequency for MNA purposes.



#### 2 SITE BACKGROUND

The Former Solutia J.F. Queeny Plant (Queeny Plant or Site) is located between Lesperance and Barton Streets and First and Second Streets in St Louis, Missouri. A single address often provided for the Queeny Plant is 200 Russell Street, St Louis, Missouri. Figure 1 is a general Site Location Map showing the Queeny Plant located in the western portion of the Cahokia, Illinois, U.S. Geological Survey (USGS) topographic quadrangle. Figure 2 is site plan using an aerial overlay to help illustrate present features of the site and the adjacent property.

SWH Investments II legally purchased the Queeny Plant and assumed the environmental obligations for the property effective June 13, 2008. EOI, in affiliation with SWH Investments II, is assuming the responsibilities for the environmental obligations for the Queeny Plant in order to prepare the property for redevelopment for light industrial and commercial use.

#### 2.1 Geology

The site area is considered to be part of the Mississippi River flood plain. A significant amount of development has occurred over the past 200 years and the associated filling activities have raised the ground surface elevation and extended it eastward. The stratigraphy beneath the site consists of four main units (from top down), fill, silty clay, sand, and limestone bedrock.

A bedrock high beneath the central portion of the facility affected the configuration of some of these units, and also influences groundwater conditions. The fill and silty clay unit are present across the site. The sand unit is present beneath the silty clay in the northern and southern portions of the site, away from the bedrock high. The sand, where present, extends downward to bedrock. Bedrock occurs at depths varying from 10 feet to approximately 80 feet beneath the site. Limestone bedrock underlies the site to the depths explored. A more detailed discussion was presented in the IMWP.

#### 2.2 Hydrogeology

On a large scale, groundwater flows characteristically from west to east in the site area toward the major groundwater discharge feature of the area, the Mississippi River. However, within the Former Queeny Plant, local groundwater flow is influenced by the bedrock high noted in the central portion of the site. Shallow groundwater in this area generally flows radially off the bedrock high and then east toward the river once it is off the bedrock high. The sand unit represents the major groundwater migration pathway due to its hydraulic properties (i.e., relatively thick and permeable). Groundwater in the bedrock unit is believed to generally flow east toward the Mississippi River. The primary pathways of flow within the bedrock are through secondary porosity features including fractures, joints, bedding planes, or solution cavities. A more detailed discussion was presented in the IMWP.



#### 3 PURPOSE

The CMIWP includes a revised groundwater monitoring plan to generate data for the MNA portion of the approved remedy. The vapor intrusion portion evaluates potential for vapor generation from the groundwater impacts onsite and in downgradient locations to the north of the site.

Sections 4 and 5 of this work plan addresses the procedures for conducting the work, including collection and analyses of samples.



#### 4 SITE ACTIVITIES - GROUNDWATER

Site activities will be performed in accordance with the existing Baseline Groundwater Monitoring Plan (BGMP), and the Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP) included in the approved IMWP.

#### 4.1 Groundwater Monitoring Well Installation

One replacement well, designated MW-19R, will be installed in the Fill/Silty Clay Unit. The original well, MW-19, was approved for closure to facilitate the construction of the Faultless Linen building. Based upon previous installation information, the anticipated well depth will be around 20 feet below grade. Standard operating procedures (SOPs) related to well installation were in the BGMP and will be applied here as well.

The monitoring well will be installed using hollow stem auger (HSA) techniques. As this is a replacement well, no soil logging or sampling will be performed.

At the completion of the boring, the monitoring well will be constructed in accordance with state of Missouri guidelines by a permitted Missouri well driller. Monitoring wells will be constructed of two-inch diameter Schedule 40 polyvinyl chloride (PVC) casing, with a ten foot section of 0.010-in. well screen. A sand filter pack consisting of silica sand will be installed through the casing from the base of the well and extended to approximately two-foot above the top of the well screen. During placement of the sand pack, the height will be checked periodically to ensure that the volume placed within the annulus correlates to the calculated volume required to fill the annular space. A bentonite seal with a thickness of three to five-foot will be installed directly above the sand pack. The remaining annular space will be filled with a cement/bentonite or high solids grout. The surface completion of the monitoring wells will include placement of a concrete pad, installation of locking caps and a flush-mount well cover as this location is subject to traffic and parking of vehicles. Monitoring well construction information will be documented on the boring logs and monitoring well construction diagrams.

The monitoring well will be developed to remove the fines from the well and sand. This will be performed using a conventional groundwater pump, air-lift system, or equivalent methods suitable for well development. Each monitoring well will be developed until a minimum of five well volumes have been removed and pH, specific conductance, and temperature readings stabilize within 10% over a minimum of two successive readings. The field measurements will be obtained and recorded on monitoring well development sheets.



#### 4.2 Groundwater Network

The original monitoring program was developed to evaluate site-wide groundwater for the former FF Building Area and the former APA, and monitor groundwater discharging to the Mississippi River from the FBCSA.

The original monitoring well locations included background wells, source area wells, and downgradient wells within and along the groundwater plume boundaries. Most of the source area wells are screened in the Fill and Silty Clay Unit. This plan will include monitoring the Fill and Silty Clay Unit to evaluate the MNA remedy.

The revised monitoring network and frequency is shown in Table 1. The wells and sample frequency are depicted in Figure 3 for the Fill and Silty Clay Unit wells.

#### 4.3 Groundwater Sampling

SOPs related to groundwater sampling were provided in the BGMP. Groundwater samples will be collected and analyzed for the following analytes: 1,1,1-trichloroethane, 1,2-dichloroethane, acetone, benzene, chlorobenzene, chloroform, cis-1,2-dichloroethene, ethylbenzene, methylene chloride, tetrachloroethene, toluene, trichloroethene, trans-1,2-dichloroethene, vinyl chloride, and xylenes. Note that this list is the same as approved in the revised groundwater monitoring plan (July 2016). In addition, alachlor will be an analyte only for the wells in the APA.

The dechlorination and degradation of tetrachoroethene through its daughter products will be one indicator of the natural attenuation process. To further evaluate monitored natural attenuation indicators, the groundwater samples will be collected and laboratory analyzed for sulfate, iron, and dissolved gases (ethane, ethane, and methane). Dissolved oxygen and oxygen reduction potential will be obtained in addition to the normal field parameters collected (pH, conductivity, and temperature).

#### 4.4 Monitoring Well Closures

Monitoring wells no longer needed in the monitoring network, or historical wells that were not part of the network, will be closed. EPA will be contacted when wells are identified for closure. Wells will be abandoned in accordance with the Missouri Department of Natural Resources regulation 10CSR 23-4.080.

#### 4.5 Decontamination and Investigation-Derived Waste

Field personnel and equipment will undergo decontamination procedures to ensure the health and safety of those present, to maintain sample integrity, and to minimize the movement of contamination between the work area and off-site locations. Non-disposable/non-dedicated equipment used on-site will be decontaminated prior to beginning work, between sampling



locations and/or uses, and prior to demobilizing from the site. Purging and sampling equipment will be decontaminated between each sample acquisition by washing with an Alconox® or equivalent detergent wash and a potable water rinse. The inside of equipment will be decontaminated by pumping wash and rinse water through the pump, flow through cell, etc. Personnel and small equipment decontamination will be performed at the sample locations.

Disposable sampling equipment, such as gloves, will be collected and bagged on a daily basis and managed in accordance with Solutia procedures. Soil cuttings will be containerized and staged pending characterization. Development, decon, and purge water will be containerized pending characterization for handling/disposal. EOI will submit a Special Discharge Application request (along with supporting analytical data) to the St. Louis Metropolitan Sewer District (MSD) to discharge IDW related water, if needed. The approval would allow this material to be discharged at a controlled rate to the facility sewer (monitoring point 003).



#### 5 SITE ACTIVITIES – VAPOR INTRUSION

A vapor intrusion (VI) concern was part of the approved remedy, addressed through the institutional controls, specifically the environmental covenant executed by SWH Investments II, LLC and the EPA, and filed with the recorder of Deeds for the City of St. Louis, Missouri on April 26, 2018.

Per the remedy, prior to the commencement of any new construction, the need for vapor barriers and vapor intrusion mitigation systems will be evaluated by EPA on any future buildings constructed on the Property in order to address potential exposures through vapor intrusion until such time as groundwater concentrations have decreased to levels that no longer pose a vapor intrusion threat. EPA evaluation will not be required on future construction with planned vapor intrusion mitigation systems and vapor barriers. If EPA determines that vapor intrusion may pose a potential threat to occupants of a planned building, a vapor barrier and/or vapor intrusion mitigation system will be installed on the building. In addition, an indoor air and vapor intrusion mitigation system monitoring plan subject to EPA approval will be developed and implemented for the building.



#### **6 FIELD DOCUMENTATION**

Field documentation will consist the following:

- Well Installation logs. These will document the monitoring well construction details.
- Well Sampling logs. These will include information such as depth to water, field parameters, purging rate and volumes, and well condition.
- Chain-of-custody records.



#### 7 TIMELINE AND REPORTS

#### 7.1 Project Timeline

The project timeline for initiating sampling is dependent on receiving agency approval and site access from the property owner. Approval and implementation is anticipated to be some time in the third quarter of 2018. The duration of the work is anticipated to run at least 10 years.

#### 7.2 Reports

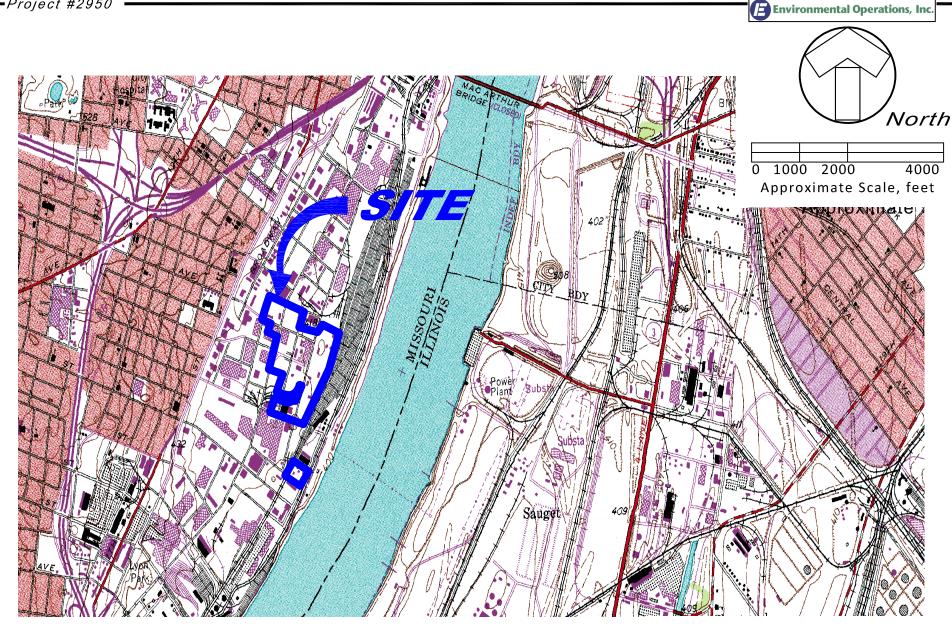
Reports for the groundwater MNA will be generated annually during the period when samples are collected on an annual basis. Thereafter, reporting will be subsequent to the sampling event. Interim reporting of data will be sent as attachments to progress reports.

#### 7.3 Project Cost Estimate

EPA has requested a cost estimate associated with implementation. Table 2 shows annual and cumulative costs associated with the definable component of the groundwater monitoring. It assumes changes in frequency over time in sampling events and use of additional MNA analyses in the out years. For simplicity, it keeps the number of wells static; however, the number may be decreased over time depending on data.



#### **FIGURES**



#### LEGEND

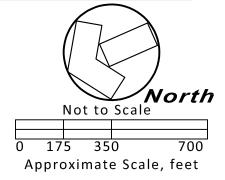
GENERAL LOCATION OF J.F. QUEENY PLANT / SOLUTIA SITE

BASE MAP REFERENCE: MAP TAKEN FROM ELECTRONIC USGS DIGITAL RASTER GRAPHIC 7.5 MINUTE SERIES TOPOGRAPHIC MAP OF CAHOKIA, ILLINOIS, REVISED 1952.

#### Site Location Map

Former Solutia Queeny Plant Saint Louis Missouri





# PERIMETER OF SOLUTIA PROPERTY HISTORICAL/MAXIMUM PERIMETER OF SOLUTIA PROPERTY PERIMETER OF RAIL YARD & RAILROAD RIGHT-OF-WAY U.S. ARMY CORPS OF ENGINEERS FLOODWALL FAULTLESS LINEN PARCEL

#### Note:

Illustration based on Google Earth Imagery dated 2.24.2018. This figure should only be used for general illustrative purposes and should not be used for any other purpose beyond the context of the report/letter.

Site Aerial Photograph
Former Solutia Queeny Plant
Saint Louis, Missouri



#### **TABLES**

Table 1
Groundwater Monitoring Network and Sampling Frequency

Monitoring Area	Monitoring Location ID and Criteria*	Frequency	Frequency	Frequency	Frequency
		Years 1-5	Years 6-10	Years 11-20	Years 21-30
Former FF Building	Fill and Silty Clay Unit				
Area	MW-2B - Background and side-gradient	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-7B - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-17 - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-28A - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-30A - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-36A - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-38A - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-39A - Background	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-40A - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
Former Bulk	Fill and Silty Clay Unit				
Chemical Storage	VW-1 - Source Area Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	VW-2 - Source Area Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-24A - Source Area Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
Acetanilides	Fill and Silty Clay Unit				
	GM-1 - Source Area Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	GM-2 - Source Area Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-9 - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-13 - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-15 - Background and downgradient	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-19R - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30
	MW-23 - Downgradient Well	Annually	Every other year	Years 15 and 20	Years 25 and 30

<sup>\*</sup> The well network may be reduced over time depending on data.

TABLE 2
NET PRESENT WORTH EVALUATION
CORRECTIVE MEASURES IMPLEMENTATION
(GROUNDWATER MONITORING)

		Institutional Controls				Year		Cost	]	Inflation 2%		scount to sent Worth 7%		Present mulative)
	Implementation					0	\$	6,000	\$	6,000	\$	6,000	\$	6,000
Qty	Unit Cost	Unit	Item		Cost	1	\$	19,200	\$	19,584	\$	18,303	\$	24,303
						2	\$	19,200	\$	19,976	\$	17,448	\$	41,750
1	\$5,000	ea Develop and implement institutional	controls	\$	5,000	3	\$	19,200	\$	20,375	\$	16,632	\$	58,383
		Contingency (20%)		\$	1,000	4	\$	19,200	\$	20,783	\$	15,855	\$	74,238
			Total:	\$	6,000	5	\$	19,200	\$	21,198	\$	15,114	\$	89,352
						6	\$	8,400	\$	9,460	\$	6,303	\$	95,655
						7	\$	8,400	\$	9,649	\$	6,009	\$	101,664
	Annual Costs	Years 1-5				8	\$	8,400	\$	9,842	\$	5,728	\$	107,392
1	\$15,000	Groundwater sampling / Consulting	Reporting (Annually)	\$	15,000	9	\$	8,400	\$	10,039	\$	5,460	\$	112,853
1	\$1,000	Maintain institutional controls		\$	1,000	10	\$	8,400	\$	10,240	\$	5,205	\$	118,058
		Contingency (20%)		\$	3,200	11	\$	3,120	\$	3,879	\$	1,843	\$	119,901
			Total:	\$	19,200	12	\$	3,120	\$	3,957	\$	1,757	\$	121,658
						13	\$	3,120	\$	4,036	\$	1,675	\$	123,333
						14	\$	3,120	\$	4,117	\$	1,597	\$	124,929
	Annual Costs	Years 6-10				15	\$	3,120	\$	4,199	\$	1,522	\$	126,451
1	\$6,000	Groundwater sampling / Consulting	Reporting (2 yr interval)	\$	6,000	16	\$	3,120	\$	4,283	\$	1,451	\$	127,902
1	\$1,000	Maintain institutional controls		\$	1,000	17	\$	3,120	\$	4,369	\$	1,383	\$	129,285
		Contingency (20%)		\$	1,400	18	\$	3,120	\$	4,456	\$	1,318	\$	130,603
			Total:	\$	8,400	19	\$	3,120	\$	4,545	\$	1,257	\$	131,860
				•	-,	20	\$	3,120	\$	4,636	\$	1,198	\$	133,058
	Annual Costs	Years 11-29				21	\$	3,120	\$	4,729	\$	1,142	\$	134,200
1	\$1.600	Groundwater sampling / Consulting	Reporting (5 vr interval)	\$	1.600	22	\$	3,120	\$	4,823	\$	1,089	\$	135,289
1	\$1,000	Maintain institutional controls		\$	1,000	23	\$	3,120	\$	4,920	\$	1,038	\$	136,327
	, ,	Contingency (20%)		\$	520	24	\$	3,120	\$	5,018	\$	989	\$	137,316
		g, (,	Total:	\$	3,120	25	\$	3,120	\$	5,119	\$	943	\$	138,259
			Total.	Ψ	3,120	26	\$	3,120	\$	5,221	\$	899	\$	139,158
	Annual Costs	Year 30				27	\$	3,120	\$	5,325	\$	857	\$	140,015
1	\$30,000	Groundwater sampling / Consulting	Reporting/Well Closeout	\$	30,000	28	\$	3,120	\$	5,432	\$	817	\$	140,832
1	\$1,000	Maintain institutional controls	reporting wen closeout	\$	1,000	29	\$	3,120	\$	5,541	\$	779	\$	141,611
1	Ψ1,000	Contingency (20%)		\$	6,200	30	\$	37,200	\$	67,383	\$	8,852	\$	150,463
		Contingency (2070)	T-4-1.	Ψ		50	Ψ	57,200	Ψ	07,505	Ψ	0,032	Ψ	150,405
			Total:	Þ	37,200									

Assumes number of wells are constant; no laboratory MNA parameters after year 10; wells closed in year 30



### APPENDIX A RESTRICTIVE COVENANT

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BOOK PAGE 04262018-0043

RECORDER OF DEEDS CITY OF ST. LOUIS RECORDED-CERTIFIED ON 04/26/2018 8:59 AM

#### SHARON QUIGLEY-CARPENTER RECORDER OF DEEDS

PAGES: 15
AMOUNT DUE: 93.00
4980413
THIS DOCUMENT WAS ERECORDED

(ABOVE SPACE RESERVED FOR RECORDER'S USE)

Document Title: Environmental Covenant

Document Date: Rocil 12, 2018

Grantor: SWH Investments II, LLC

c/o Environmental Operations, Inc. 1530 South Second Street, Suite 200

St. Louis, MO 63104

Grantee: SWH Investments II, LLC

c/o Environmental Operations, Inc. 1530 South Second Street, Suite 200

St. Louis, MO 63104

Department: U.S. Environmental Protection Agency

11201 Renner Boulevard

Lenexa, KS 66219

Legal Description: See attached Exhibit A

#### **ENVIRONMENTAL COVENANT**

This Environmental Covenant ("Covenant") is entered into by and between the Grantor, SWH Investments II, LLC ("Owner"), a Missouri limited liability company, the Grantee, SWH Investments II, LLC ("Holder"), and the U.S. Environmental Protection Agency ("EPA" or "Department") pursuant to the Missouri Environmental Covenants Act ("MoECA"), Sections 260.1000 through 260.1039, RSMo. Owner, Holder, and the Department may collectively be referred to as the "Parties" herein.

#### **RECITALS**

WHEREAS, Owner has fee simple title to certain real property located in the City of St. Louis, Missouri, which consists of property that formerly comprised the J. F. Queeny Facility. This facility is currently subject to a hazardous waste management facility storage and incinerator permit issued to Monsanto Company on November 8, 1989 (Permit No. MOD004954111) by the Missouri Department of Natural Resources ("MDNR") pursuant to the Missouri Hazardous Waste Management Law and implementing regulations, and a corrective action permit issued (same date and permit number) to Monsanto-John F. Queeny Plant by EPA pursuant to the Resource Conservation and Recovery Act and implementing regulations. This property is legally described in Exhibit A (the "Property");

WHEREAS, Owner desires to grant to Holder this Covenant, as provided in MoECA, subjecting the Property to certain activity and use limitations for the purpose of ensuring the protection of human health and the environment by minimizing the potential for exposure to contamination that remains on the Property and to ensure that the Property is not developed, used, or operated in a manner incompatible with the environmental response project implemented at the Property;

WHEREAS, on September 30, 2009, Owner, Environmental Operations, Inc. ("EOI"), and EPA entered into an Administrative Order on Consent ("AOC") for the performance of an environmental response project at the Property. This AOC is on file with the EPA Region 7 Hearing Clerk under Docket No. RCRA-07-2009-0015. Pursuant to this AOC, Owner and EOI agreed, and were ordered, to, among other things, conduct Interim Measures at the Property in accordance with the schedule and requirements of an EPA-approved Interim Measures Work Plan ("IMWP") which was incorporated into and enforceable as an element of the AOC. In summary and in pertinent part, the EPA-approved IMWP required Owner and EOI to perform, at a minimum, the following tasks:

- a. The excavation and proper disposal of all soils contaminated with polychlorinated biphenyls ("PCBs") at levels exceeding 100 parts per million ("ppm") in the area of the former VV Building located on the Property. This also includes disposal sampling, verification sampling and backfilling the area of excavation to surface grade using clean materials;
- b. Based on verification sampling, after the excavation of soils exceeding 100 ppm, and fill of excavated areas, Owner and EOI were required to delineate all soil

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areas associated with the former VV Building area which have PCBs remaining at concentrations greater than 10 ppm, and install a cap over these areas (constructed in accordance with the approved IMWP);

- c. The installation of monitoring wells in the former VV Building area to demonstrate that PCB contamination in soils has not migrated to groundwater;
- d. The installation of multiple temporary injection wells at the former FF Building located on the Property, with wells in the Former Bulk Chemical Storage Area ("FBCSA") and Acetanilides Production Area; and
- e. The injection of oxidation reagents into the temporary injection wells described above for the purpose of chemically destroying source material in the capillary fringe and upper saturation zone to enhance the long-term biodegradation of volatile organic compounds ("VOCs").

WHEREAS, upon completion of the environmental response project described above, certain contaminants of concern will remain on the Property above levels that allow for the unrestricted use of the Property; and

WHEREAS, the environmental response project described above is deemed protective if, and only if, the activity and use limitations described in this Covenant remain in place for as long as the contaminants of concern remain at the Property above levels that allow for the unrestricted use of the Property.

NOW THEREFORE, Owner, Holder, and EPA as the "Department" as defined at Section 260.1003(3) of MoECA, agree to the following:

#### 1. Parties.

The Owner, Holder, and EPA are parties to this Covenant, and may enforce it as provided in Section 260.1030, RSMo.

#### 2. Activity and Use Limitations.

Owner hereby subjects the Property to, and agrees to comply with, the following activity and use limitations:

a. No Residential Land Use - Based on reports on file at EPA's offices in Lenexa, Kansas and MDNR's offices in Jefferson City, Missouri, the Property currently meets EPA's and MDNR's standards for non-residential use. Therefore, contaminants of concern remaining at the Property do not pose a significant current or future risk to human health or the environment so long as the following restrictions remain in place. The Property shall <u>not</u> be used for residential purposes, which for purposes of this Covenant include, but are not limited to: single family homes, duplexes, multi-plexes, apartments, condominiums, schools, retirement or

senior/child care facilities, or any land use where persons can be expected to reside.

- b. No Drilling or Use of Groundwater Based on reports on file at EPA's offices in Lenexa, Kansas and MDNR's offices in Jefferson City, Missouri, contaminants of concern remain in groundwater in one or more zones beneath the Property at levels exceeding Maximum Contaminant Levels ("MCLs") set forth in the Safe Drinking Water Act, 42 U.S.C. §§ 300j-26, and regulations promulgated thereunder at 40 C.F.R. Part 141. The MCLs are the maximum permissible levels of contaminants in water which is delivered to any user of a public water system. Therefore, in addition to any applicable state or local well use restrictions, the following restrictions shall apply to the Property:
  - (i) Groundwater from the Property shall not be consumed or otherwise used for any purpose, except as approved by EPA or MDNR for the collection of samples for environmental analysis purposes, collection or treatment of groundwater for remedial purposes, or collection or treatment of groundwater as part of excavation or construction activities;
  - (ii) There shall be no drilling or other artificial penetration of any groundwater-bearing unit(s) containing contaminants, unless Owner/Transferee has notified EPA or MDNR at least 30 days prior to such activity and
  - (iii) Installation of any new groundwater wells on the Property is prohibited, except for wells used for investigative, monitoring, and/or remediation purposes installed in accordance with a work plan approved by EPA or MDNR.
- c. Disturbance of Soil Based on reports on file at EPA's offices in Lenexa, Kansas and MDNR's offices in Jefferson City, Missouri, the contaminants of concern remaining at the Property exceed EPA's and MDNR's standards for non-residential use and construction worker exposure, but do not pose a significant current or future risk to human health or the environment with respect to non-residential uses of the Property so long as the soil is not disturbed such that exposure may result. Therefore, soil at the Property shall not be excavated or otherwise disturbed in any manner except for minor excavations (surface to 12 inches in depth) without the prior written approval of EPA or MDNR. If an Owner/Transferee desires to disturb soil at the Property, then such Owner/Transferee shall submit a notification to EPA or MDNR at least 30 days before the soil disturbance activities are scheduled to begin. Based on the potential hazards associated with the soil disturbance activities, EPA or MDNR may deny the request to disturb the soils or may require specific protective or remedial actions before allowing such soil disturbance activities to occur. Contaminated soil may be disturbed if necessary during an emergency (such as water or

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gas main break, fire, explosion or natural disaster), in which case the Owner/Transferee shall ensure that notification is provided to EPA or MDNR orally or in writing as soon as practicable, but no later than 48 hours after the disturbance begins. Any contaminated soil disturbed as part of an emergency response action must be returned to its original location and depth, or properly characterized, managed and disposed of, in accordance with all applicable local, state, and federal requirements. Within 30 days after such emergency has been abated, the Owner/Transferee shall provide a written report to EPA or MDNR describing such emergency and any response actions.

- d. Construction Worker Notice In the event that construction or excavation work is to be performed that may expose workers to contaminated soil on the Property, Owner/Transferee shall ensure that actual notice is provided in advance, both orally and in writing, to any person or entity performing any work that will or is likely to result in exposure to such soil, so that appropriate protective measures are taken to protect such workers' health and safety in accordance with applicable health and safety laws and regulations. Such notice shall include, but not be limited to, providing a copy of this Covenant to any individuals conducting or otherwise responsible for the work. Owner/Transferee shall maintain copies of any such written notice for a period of at least 3 years, and shall provide copies of such records to EPA or MDNR upon request.
- e. Vapor Intrusion Prior to the commencement of construction, the need for vapor barriers and vapor intrusion mitigation systems will be evaluated by EPA on any future buildings constructed on the Property in order to address potential exposures through vapor intrusion until such time as groundwater concentrations have decreased to levels that no longer pose a vapor intrusion threat. EPA evaluation will not be required on future construction with planned vapor intrusion mitigation systems and vapor barriers. Should EPA determine that vapor intrusion may pose a potential threat to occupants of a planned building, a vapor barrier and/or vapor intrusion mitigation system will be installed on such building. In addition, an indoor air and vapor intrusion mitigation system monitoring plan subject to EPA approval will be developed and implemented for the building.

If any person desires in the future to use the Property for any purpose or in any manner that is prohibited by this Covenant, EPA and the Holder must be notified in advance so that an Amendment, Temporary Deviation, or Termination request can be considered as described below. Further analyses and/or response actions may be required prior to any such use.

#### 3. Running with the Land.

This Covenant shall be binding upon Owner and Owner's successors, assigns, and other transferees in interest (collectively referred to as "Transferees") during their

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period of ownership (except that the obligation described below in paragraph 17 to re-direct any misdirected communication shall continue beyond an Owner/Transferee's period of ownership), and shall run with the land, as provided in Section 260.1012, RSMo, subject to amendment or termination as set forth herein. The term "Transferee(s)," as used in this Covenant, shall mean any future owner of any interest in the Property or any portion thereof, including, but not limited to, owners of an interest in fee simple, mortgagees (subject to applicable lender liability protections prescribed by law), easement holders, and/or lessees.

#### 4. Location of Files and Records.

Records of this environmental response project for the Property are currently located at EPA's offices in Lenexa, Kansas and MDNR's offices in Jefferson City, Missouri. Information regarding the environmental response project may be obtained by making a request to EPA pursuant to the federal Freedom of Information Act, 5 U.S.C. § 552, or to MDNR pursuant to the Missouri "Sunshine Law", Chapter 610, RSMo. Requests should reference the site identification name of "Monsanto – John F. Queeny Plant, MOD004954111."

#### 5. Enforcement.

Compliance with this Covenant may be enforced as provided in Section 260.1030, RSMo. MDNR (and any successor agencies) is expressly granted the power to enforce this Covenant. Failure to timely enforce compliance with this Covenant or the activity and use limitations contained herein by any party shall not bar subsequent enforcement by such party and shall not be deemed a waiver of the party's right to take action to enforce any non-compliance. Nothing in this Covenant shall restrict any person from exercising any authority or rights under any other applicable law.

In addition to or in lieu of any other remedy authorized by law, prior to taking legal action to enforce this Covenant, EPA may require Owner/Transferee to submit a plan to investigate and/or correct any alleged violation of this Covenant, in which case EPA will provide written notification to the Holder. If such Owner/Transferee fails to act within the required timeframe or if EPA finds a proposed remedy unacceptable, EPA may pursue any remedy authorized by law. In such event, EPA will provide written notification to the Holder, prior to or contemporaneously with any legal action taken to enforce this Covenant. Should MDNR decide to exercise its right to enforce this Covenant, MDNR shall so notify EPA and Holder at least 30 calendar days in advance of taking formal action to do so.

#### 6. Right of Access.

Owner, on behalf of itself and any Transferees, hereby grants to the Holder, EPA, and MDNR and their respectively authorized agents, contractors, and employees, the right to access the Property at all reasonable times for implementation, monitoring, inspection, or enforcement of this Covenant and the related environmental response project. Nothing herein shall be deemed to limit or

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otherwise impede EPA's or MDNR's rights of access and entry under state or federal law or agreement.

#### 7. Compliance Reporting.

Owner/Transferee shall submit to the Holder, EPA, and MDNR by no later than January 31<sup>st</sup> of each year, documentation verifying that the activity and use limitations imposed hereby were in place and complied with during the preceding calendar year. The Compliance Report shall include the following statement, signed by Owner/Transferee:

I certify that to the best of my knowledge, after thorough evaluation of appropriate facts and information, the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

In the event that an Owner, Transferee, or Holder becomes aware of any noncompliance with the activity and use limitations described in paragraph 2 above, such person or entity shall notify all other Parties to this Covenant in writing as soon as possible, but no later than 10 business days thereafter.

#### 8. Additional Rights.

Reserved.

#### 9. Notice upon Conveyance.

Each instrument hereafter conveying any interest in the Property, or any portion of the Property, shall contain a notice of the activity and use limitations set forth in this Covenant, and provide the recording reference for this Covenant. The notice shall be substantially in the following form:

THE INTEREST	CONVEYEI	D HEREBY	IS SUB.	JECT TO	AN	
ENVIRONMEN'	TAL COVEN	IANT, DAT	ED		, 2018,	
RECORDED IN	THE OFFICE	E OF THE F	RECORE	ER OF I	DEEDS	OF
THE CITY OF S	T. LOUIS, M	ISSOURI, O	NC		2018,	AS
DOCUMENT	, BOOK	_, PAGE			•	

Owner/Transferee shall notify the Holder, EPA, and MDNR within 10 days following each conveyance of an interest in any portion of the Property. The notice shall include the name, address, and telephone number of the Transferee, and a copy of the deed or other documentation evidencing the conveyance.

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#### 10. Representations and Warranties.

Owner hereby represents and warrants to the Holder and EPA that:

- a. Owner has the power and authority to enter into this Covenant, to grant the rights and interests herein provided and to carry out all of Owner's obligations hereunder; and
- b. this Covenant will not materially violate or contravene or constitute a material default under any other agreement, document or instrument to which Owner is a party or by which Owner may be bound or affected.

#### 11. Amendments, Termination, and Temporary Deviations.

This Covenant may be amended or terminated by approval of EPA, Holder, and the current Owner/Transferee of record at the time of such amendment or termination, pursuant to section 260.1027, RSMo. Any other Parties to this Covenant hereby waive the right to consent to any amendment to, or termination of, this Covenant. Following signature by all requisite persons or entities on any amendment or termination of this Covenant, Owner/Transferee shall record and distribute such documents as described below.

Temporary deviations from the obligations or restrictions specified in this Covenant may be approved by EPA in lieu of a permanent amendment to this Covenant. Owner/Transferee may submit a written request to EPA to temporarily deviate from specified requirements described herein for a specific purpose and timeframe. Any such request shall be transmitted to the Holder and EPA as described below. The request must specifically invoke this paragraph of this Covenant, fully explain the basis for such temporary deviation, and demonstrate that protection of human health and the environment will be maintained. EPA will evaluate the request and convey approval or denial in writing. Owner/Transferee may not deviate from the requirements of this Covenant unless and until such approval has been obtained.

#### 12. Severability.

If any provision of this Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

#### 13. Governing Law.

This Covenant shall be governed by and interpreted in accordance with the laws of the State of Missouri.

#### 14. Recordation.

Within 30 days after the date of the final required signature upon this Covenant or any amendment or termination thereof, Owner shall record this Covenant with the appropriate recorder of deeds for each city or county in which any portion of the Doc Number: 04262018-0043 Page: 9 of 15

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Property is situated. Owner shall be responsible for any costs associated with recording this Covenant.

#### 15. Effective Date.

The effective date of this Covenant shall be the date upon which the fully executed Covenant has been recorded with the office of the recorder of each city or county in which the Property is situated.

#### 16. Distribution of Covenant.

Within 30 days following the recording of this Covenant, or any amendment or termination of this Covenant, Owner/Transferee shall, in accordance with Section 260.1018, RSMo, distribute a file- and date-stamped copy of the Covenant as recorded with the appropriate recorder of deeds (including book and page numbers) to: (a) each of the Parties hereto; (b) each person holding a recorded interest in the Property, including any mortgagees or easement holders; (c) each person in possession of the Property; (d) each municipality or other unit of local government in which the Property is located; (e) MDNR; and (f) any other person designated herein.

#### 17. Contact Information.

Any document or other item required by this Covenant to be given to another party hereto shall be sent to:

#### If to Owner/Transferee:

SWH Investments II, LLC c/o Environmental Operations, Inc. 1530 South Second Street, Suite 200 St. Louis, MO 63104

#### If to EPA:

Director, Air and Waste Management Division U.S. Environmental Protection Agency, Region 7 11201 Renner Blvd. Lenexa, KS 66219

#### If to MDNR:

Missouri Department of Natural Resources P.O. Box 176 Jefferson City, MO 65102-0176

The Owner/Transferee, Holder, EPA, or MDNR may change their designated recipient of such notices by providing written notice of the same to each other. If any notice or other submittal under this Covenant is received by a former

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Owner/Transferee who no longer has an interest in the Property, then such former Owner/Transferee shall notify EPA, Holder, MDNR, and the current Owner/Transferee of the Property regarding the misdirected communication.

#### 18. Reservation of Rights.

This Covenant is a necessary component of the environmental response project described above. Nothing in this Covenant shall be construed so as to relieve any Owner/Transferee from the obligation to comply with this Covenant during their period of ownership, or the obligation to comply with any other source of law. This Covenant is not a permit, nor does it modify any permit, order, agreement, decree, or judgment issued under any federal, State, or local laws or regulations, and EPA does not warrant or aver in any manner that an Owner/Transferee's compliance with this Covenant will constitute compliance with any such requirements. EPA and MDNR reserve all legal and equitable remedies available to enforce this Covenant or any other legal requirement. Nothing herein shall be construed so as to prevent EPA, Holder, or MDNR from taking any independent actions as allowed by law.

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The undersigned represent and certify that they are authorized to sign this Covenant on behalf of their respective Parties.

IT IS SO AGREED:

FOR SWH INVESTMENTS II, LLC, a Misso	uri Limited Liability Company
By: Date (print): STAC) W. HASTIE  Title: Manusen  Address: 1530 S. Second Street  ST. LOUIS MO 63104	e: <u>413/18</u> ,
STATE OF MISSOURI ) CITY OF SAINT LOUIS )	
On this day of April, 2018, personally appeared day of Hastie, the Missouri limited liability company, known to me Environmental Covenant on behalf of said limite that he/she executed the same for the purposes the	d liability company and acknowledged to me
Bridget A. Dunn  BRIDGET A. DUNN  My Commission Expires  August 14, 2021  St. Louis County  Commission #05439301  Commission #05439901	Bulget a. Dur Notary Public

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#### FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY

By:  Becky Weber, Director  Air and Waste Management Division  U.S. Environmental Protection Age  11202 Renner Boulevard  Lenexa, KS 66219	
COUNTY OF JUMSON	}
personally appeared Becky Weber (or Division of the U.S. Environmental Pro	, 2018, before me a Notary Public in and for said state, her designee), Director of the Air and Waste Management otection Agency, Region 7, known to me to be the person behalf of said agency and acknowledged to me that she/he crein stated.

#### Attachment A – Legal Description

TWO TRACTS OF LAND BEING ALL OF LOTS 2 AND 3 OF SOULARD BUSINESS PARK, AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 02212018, PAGE 0124 OF THE ST. LOUIS CITY, MISSOURI RECORDS, SAID TRACTS BEING SITUATED IN ALL OR PARTS OF ST. LOUIS CITY BLOCKS 714, 720, 723, 724, 733, 735, 738, 872 AND 6501 INCLUSIVE OF THOSE STREETS AND ALLEYS VACATED THEREIN AND BEING INCLUSIVE OF ALL OF TRACT I-IIB OF KOSCIUSKO SUBDIVISION AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 34 PAGE 13 OF THE ST. LOUIS CITY RECORDS, AND A PART OF LOT 1 OF A SUBDIVISION OF CITY BLOCK 714 AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 60 PAGE 41 OF THE ST. LOUIS CITY RECORDS, ALL IN THE CITY OF ST. LOUIS, MISSOUR! AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE NORTH LINE OF LESPERANCE STREET, 50' WIDE, VACATED BY ST. LOUIS CITY ORDINANCE NUMBER 51744 WITH THE EASTERN LINE OF THIRD STREET, 60 FEET WIDE: SAID POINT BEING THE NORTHWEST CORNER OF TRACT I-IIB OF KOSCIUSKO SUBDIVISION AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 34 PAGE 13 OF THE ST. LOUIS CITY RECORDS; THENCE WITH THE NORTH LINE OF SAID KOSCIUSKO SUBDIVISION AND BEING THE NORTH LINE OF LESPERANCE STREET, SOUTH 67°00'08" EAST A DISTANCE OF 342.06 FEET TO THE CENTERLINE OF SECOND STREET, 60' WIDE, VACATED BY ST. LOUIS CITY ORDINANCE NUMBER 55641; THENCE ALONG SAID CENTERLINE SOUTH 38° 50' 39" WEST 10.63 FEET TO A POINT ON THE WESTERN PROLONGATION OF THE SOUTH LINE OF LOT B OF THE SUBDIVISION OF BLOCK 714 AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 03292005 PAGE 480 OF THE ST. LOUIS CITY RECORDS; THENCE DEPARTING THE VACATED CENTERLINE OF SECOND STREET WITH THE SOUTH LINE OF SAID LOT B OF SAID SUBDIVISION OF BLOCK 714, SOUTH 66°54'54" EAST 394.21 FEET TO A POINT, THENCE ALONG THE NORTHWEST LINE OF SAID LOT B, SOUTH 23°28'24" WEST 197.61 FEET TO THE SOUTHWEST CORNER OF SAID LOT B; THENCE ALONG THE SOUTH LINE OF SAID LOT B, SOUTH 67°30'32" EAST 19.09 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF DEKALB STREET, VACATED BY ORDINANCE NO.S 43004, 50258 AND 68500; THENCE ALONG LAST SAID EAST VACATED RIGHT-OF-WAY LINE OF DEKALB STREET, SOUTH 23° 23' 25" WEST, 742.80 FEET; THENCE DEPARTING LAST SAID EAST VACATED RIGHT-OF-WAY LINE, SOUTH 67° 05' 23" EAST, 371.08 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF KOSCIUSKO STREET, 60 FEET WIDE, VACATED BY ORDINANCE NO. 57176 AND 50258; THENCE ALONG LAST SAID EAST

VACATED RIGHT-OF-WAY LINE, NORTH 22° 54' 19" EAST, 261.39 FEET TO A POINT: THENCE DEPARTING LAST SAID EAST VACATED RIGHT-OF-WAY LINE, NORTH 73° 51' 48" EAST, 390.38 FEET TO A POINT ON THE SOUTH LINE OF RUSSELL AVENUE. 50 FEET WIDE, VACATED BY ORDINANCE NO. 50258; THENCE ALONG LAST SAID SOUTH VACATED RIGHT-OF-WAY LINE, SOUTH 66° 56' 57" EAST, 56.15 FEET TO A POINT ON THE WEST LINE OF MISSOURI PACIFIC RAILROAD RIGHT-OF-WAY; THENCE WITH THE SAID WEST RIGHT-OF-WAY LINE THE FOLLOWING COURSES AND DISTANCES: SOUTH 18°52'52" WEST 305.91 FEET TO A POINT OF CURVATURE; THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 680.00 FEET, AN ARC DISTANCE OF 173.54 FEET TO A POINT OF TANGENCY; THENCE SOUTH 33°30'12" WEST 857.68 FEET TO THE CENTERLINE OF BARTON (66' WIDE) STREET; THENCE WITH THE SAID CENTERLINE OF BARTON STREET AND THE SOUTH LINE OF THAT PART OF BARTON STREET VACATED BY ST. LOUIS CITY ORDINANCE NUMBER 57176, NORTH 67°00'08" WEST 218.34 FEET TO A POINT; THENCE NORTH 22° 59' 52" EAST 33.00 FEET ALONG THE WEST LINE OF SAID BARTON STREET VACATION TO THE NORTH LINE OF SAID BARTON STREET; THENCE ALONG SAID NORTH LINE OF BARTON STREET, NORTH 67° 00' 08" WEST 400.17 FEET TO A CROSS FOUND FOR THE INTERSECTION OF THE NORTH LINE OF BARTON STREET AND THE CENTERLINE OF DEKALB STREET, 60 FEET WIDE, BEING THE SOUTHWEST CORNER OF THAT PART OF DEKALB STREET VACATED BY ST. LOUIS CITY ORDINANCE NUMBER 45381; THENCE ALONG SAID CENTERLINE OF SAID DEKALB STREET VACATION, NORTH 23° 08' 39" EAST 162.50 FEET TO THE INTERSECTION OF THE CENTERLINE OF SAID DEKALB STREET WITH THE WESTERLY PROLONGATION OF THE SOUTH LINE OF A TRACT OF LAND DESCRIBED IN A DEED TO THE MANUFACTURERS RAILWAY COMPANY RECORDED AS DAILY NUMBER 104 ON JANUARY 7, 1946 IN THE ST. LOUIS CITY RECORDS; THENCE, DEPARTING THE CENTERLINE OF SAID DEKALB STREET AND ALONG THE SOUTH, EAST AND NORTH LINES OF SAID MANUFACTURERS RAILWAY TRACT, THE FOLLOWING COURSES AND DISTANCES: THENCE SOUTH 67°00'05" EAST 185.50 FEET, THENCE NORTH 23°17'27" EAST 78.00 FEET, THENCE SOUTH 67°00'04" EAST 185.70 FEET TO THE CENTERLINE OF KOSCIUSKO STREET, 60 FEET WIDE, VACATED BY ST. LOUIS CITY ORDINANCE NUMBER 57176; THENCE ALONG SAID CENTERLINE, BEING THE EAST LINE OF SAID MANUFACTURERS RAILWAY TRACT, NORTH 23°26'15" EAST 259.77 FEET; THENCE NORTH 66°33'45" WEST 30.00 FEET TO THE WEST LINE OF VACATED KOSCIUSKO STREET; THENCE, CONTINUING WITH THE NORTH LINE OF SAID MANUFACTURERS RAILWAY TRACT, SOUTH 53°18'35" WEST 30.12 FEET TO A POINT OF CURVATURE; THENCE SOUTHWARDLY WITH THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 320.00 FEET, AN ARC DISTANCE OF 240.07 FEET TO A POINT OF NON-TANGENCY; THENCE NORTH 67°00'02" WEST 113.69 FEET TO THE NORTHWEST CORNER OF SAID MANUFACTURERS RAILWAY COMPANY TRACT AND BEING ON THE EAST LINE OF DEKALB STREET, 60 FEET WIDE; THENCE WITH THE SAID EAST LINE OF DEKALB STREET, NORTH 23°08'39" EAST 224.00 FEET TO AN ANGLE POINT AND NORTH 23°23'25" EAST 166.44 FEET TO THE SOUTHERN POINT OF DEKALB STREET AND SOUTH TRUDEAU STREET VACATION BY ST. LOUIS CITY ORDINANCE NUMBER 68500 AND AS RECORDED IN DEED BOOK 09302010 PAGE 81 OF THE ST. LOUIS CITY RECORDS; THENCE WITH THE SOUTH LINE OF SAID VACATION AND THE CENTERLINE OF A 20 FOOT WIDE ALLEY IN ST. LOUIS CITY BLOCK 733, NORTH 67°05'23" WEST 373.80 FEET TO A POINT ON THE EAST LINE OF SECOND STREET (60 FEET WIDE); THENCE WITH THE EAST LINE OF SAID SECOND STREET, NORTH 22°48'53" EAST A DISTANCE OF 599.98 FEET TO AN ANGLE POINT AND NORTH

22°51'00" EAST A DISTANCE OF 19.91 FEET TO THE SOUTH EAST CORNER OF THAT PART OF SECOND STREET AS VACATED BY ST. LOUIS CITY ORDINANCE 55641 AND THE EASTERLY PROLONGATION OF RUSSELL STREET; THENCE WITH THE SOUTH LINE OF SAID VACATED SECOND STREET AND THE NORTH LINE OF RUSSELL STREET, NORTH 66°59'53" WEST A DISTANCE OF 216.18 FEET TO THE SOUTHEAST CORNER OF TRACT I-IIA OF KOSCIUSKO SUBDIVISION AS PER THE PLAT THEREOF RECORDED IN PLAT BOOK 34 PAGE 13 OF THE ST. LOUIS CITY RECORDS; THENCE WITH THE EAST AND NORTH LINES OF TRACT I-IIA, NORTH 23°01'48" EAST 192.42 FEET AND NORTH 67°03'03" WEST 156.50 FEET TO THE AFORESAID EAST LINE OF THIRD STREET; THENCE ALONG SAID EAST LINE, NORTH 23°01'48" EAST 155.67 FEET TO A POINT OF CURVATURE; THENCE NORTHWARDLY ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 330.00 FEET, AN ARC DISTANCE OF 43.90 FEET TO THE POINT OF BEGINNING AND CONTAINING 1,114,760 SQUARE FEET OR 25.59 ACRES, MORE OR LESS, ACCORDING TO A SURVEY BY THE STERLING COMPANY DURING THE MONTH OF MAY 2008 UNDER ORDER NUMBER 08-03-050.

#### **ALSO**

A TRACT OF LAND BEING A PART OF CITY BLOCK 872, IN THE CITY OF ST. LOUIS, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INTERSECTION OF THE EAST LINE OF FIRST (106' WIDE) STREET AND THE NORTH LINE OF VICTOR (60' WIDE) STREET THENCE WITH THE EAST LINE OF SAID FIRST STREET, NORTH 33°06'49" EAST 281.25 FEET TO THE SOUTHWEST CORNER OF A TRACT OF LAND DESCRIBED IN A DEED TO RHINO ENTERPRISES RECORDED ON 07/28/98 WITH A DAILY NUMBER 215; THENCE DEPARTING THE EAST LINE OF FIRST STREET WITH THE SOUTH LINE OF RHINO ENTERPRISES TRACT, SOUTH 52°08'36" EAST 301.44 FEET TO A POINT ON THE WEST LINE OF WHARF AS DESCRIBED IN ORDINANCE NO. 5403; THENCE WITH THE WEST LINE OF SAID WHARF, SOUTH 33°13'02" WEST 268.82 FEET AND SOUTH 37°29'40" WEST 12.35 FEET TO THE NORTH LINE OF AFORESAID VICTOR STREET; THENCE WITH THE SAID NORTH LINE, NORTH 52°08'36" WEST 300.03 FEET TO THE POINT OF BEGINNING AND CONTAINING 84,412 SQUARE FEET (1.9378 ACRES), MORE OR LESS, ACCORDING TO A SURVEY BY THE STERLING COMPANY DURING THE MONTH OF MAY 2008.